Release notes for ENDF/B Development e-095_Am_000 evaluation



October 13, 2016

• fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-095_Am_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

2. FIXME: Generic fudge unimplemented message reaction label 1: e- + Am + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Am [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: $e^- + Am$ [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Am + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Am [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Am1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 125570. eV!

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23827. eV!

6. Calculated and tabulated thresholds don't agree reaction label 5: e- + e- + Am2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23062. eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Am2p3/2 / Cross section: (Error # 0): Threshold mismatch

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WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 18527. eV!
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- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Am3s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 6102.1 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5741.6 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Am3p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4685.5 eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: e- + e- + Am3d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 4103.6 eV!
- 12. Calculated and tabulated thresholds don't agree reaction label 11: e- + e- + Am3d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3892.5 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12: e- + e- + Am4s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1595.2 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: e- + e- + Am4p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1428.2 eV!
- 15. Calculated and tabulated thresholds don't agree reaction label 14: e- + e- + Am4p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1147. eV!
- 16. Calculated and tabulated thresholds don't agree reaction label 15: e- + e- + Am4d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 877.9 eV!
- 17. Calculated and tabulated thresholds don't agree reaction label 16: e- + e- + Am4d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 826.679999999999 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 471.03 eV!

- 19. Calculated and tabulated thresholds don't agree reaction label 18: e- + e- + Am4f7/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 457.17 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 362.44 eV!
- 21. Calculated and tabulated thresholds don't agree reaction label 20: e- + e- + Am5p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 295.06 eV!
- 22. Calculated and tabulated thresholds don't agree reaction label 21: e- + e- + Am5p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 225.25 eV!
- 23. Calculated and tabulated thresholds don't agree reaction label 22: $e^- + e^- + Am5d3/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 125.29 eV!
- 24. Calculated and tabulated thresholds don't agree reaction label 23: e- + e- + Am5d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 114.9 eV!
- 25. Calculated and tabulated thresholds don't agree reaction label 24: e- + e- + Am5f5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8.2899999999999 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 7. eV!
- 27. Calculated and tabulated thresholds don't agree reaction label 26: e- + e- + Am6s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 55.06 eV!
- 28. Calculated and tabulated thresholds don't agree reaction label 27: e- + e- + Am6p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 35.14 eV!
- 29. Calculated and tabulated thresholds don't agree reaction label 28: e- + e- + Am6p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 23.89 eV!

30. Calculated and tabulated thresholds don't agree reaction label 29: e- + e- + Am7s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 5.49 eV!

- xsectplotter Warnings:
 - $\begin{array}{ccc} 1. & {\rm Mislabled~emitted~particle} \\ & \textit{Error:~ZAP~messed~up} \end{array}$

stderr while processing crossSection

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0 \dots [4 more lines]